# **Water Resources**

# Water Resources | WATER RESOURCES ADMINISTRATION

## **Program Description:**

The Water Resources Administration program provides overall management and leadership to the department, while coordinating financial activities, rates, fees, and assured water supplies.

#### Trends:

Operational costs continue to increase with the increased utilization of renewable surface water supplies. Also, unfunded federal and state mandates for water quality, designed to safeguard public health, continues to significantly impact department resources.

# **Program Broad Goals:**

Provide leadership, direction and management to deliver safe, reliable, efficient, and effective water and wastewater services to customers.

Coordinate financial activities that include prudent rates, fees and bond issuances.

Provide a long-term assured water supply for the City.

# Program 2006/07 Objectives:

Manage the City water and wastewater programs to meet or surpass all federal and state requirements.

Review and adjust rates and fees annually to ensure that rates charged for services provided are appropriately priced and that development fees pay for growth-related capital improvement needs.

Secure and maintain a long-term assured water supply for existing and future demand.

# **Program Provided in Partnership With**

Accounting, Budget, Purchasing, Utility Billing, Capital Project Management, Human Resources

# **Program Customers**

City water and wastewater customers, Accounting, Utility Billing, Capital Project Management

# **Basic Equipment**

Personal computers, Microsoft Office Suite, 10-key calculators, cell phones and pagers

# **Special Equipment**

None

#### **City Council's Broad Goal(s)**

Program Staffing	
1 FT Administrative Secretary	1.00
1 FT Drinking Water Program Coord	1.00
1 FT Financial Specialist - Water	1.00
1 FT GM Water Resources	1.00
1 FT Management Analyst, Sr	1.00
1 FT Office Coordinator - Wtr Res	1.00
1 FT Water Resources Analyst	1.00
1 FT Water Resources Engineer	1.00
1 FT Water Resources Plng & Eng Dir	1.00
1 FT Water Resources Plng Advisor	1.00
Total Program FTE	10.00

# Water Resources | WATER RESOURCES ADMINISTRATION

# **Performance Measures**

Program/Service	Outputs:	(goods,	services,	units	produced)
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	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Increased rate for water service per financial plan	3.0%	3.0%	3.5%	4.0%
Increased rate for wastewater service per financial plan	2.5%	3.0%	4.0%	4.0%

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Completed the annual review, analysis and adjustment of the twenty-year financial plan for the water and sewer funds in order to assure proper management of expected revenues and expenditures	yes	yes	yes	yes
Adjusted water and sewer development fees based on capital expenditure needs and inflation	yes	yes	yes	yes

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	807,887	1,009,506	1,009,506	974,376
Contractual Services	677,399	466,221	481,646	512,651
Commodities	80,349	76,000	76,000	88,110
Capital Outlays	21,385	-	-	-
Total Program Budget	\$1,587,020	\$1,551,727	\$1,567,152	\$1,575,137

## **Program Description:**

Planet Ranch was acquired in 1984 for its approximate 15,700 acre-feet of water rights. State requirements for an assured water supply prompted the purchase of long-term supplies for the City. Water from Planet Ranch could eventually be piped to the CAP canal south of the Ranch for transportation to Scottsdale, or the water rights will be sold or exchanged for other rights.

#### Trends:

Planet Ranch represents a long term water rights acquisition investment including asset management.

# **Program Broad Goals:**

Maintain the physical assets and water rights associated with the Ranch.

Keep the cost of maintaining the Ranch at a minimum while being prepared to resume farming activities to retain the water rights if the State denies the City request for a change of use permit from agriculture to municipal.

# Program 2006/07 Objectives:

Provide the resources and staffing necessary to maintain the assets and rights of Planet Ranch.

Provide the minimum level of security and maintenance to maintain the Ranch and assets.

# **Program Provided in Partnership With**

Water Resources Administration

# **Program Customers**

Arizona Department of Water Resources, US Fish and Game, Bureau of Reclamation

## **Basic Equipment**

Personal computers, Microsoft Office Suite, ranch related equipment

#### Special Equipment

Farm and ranch equipment including wells, irrigation systems, tractors, hay balers, machine shop tools, air compressors, welder

# City Council's Broad Goal(s)

Program Staffing	
1 FT Water Distribution Field Coord	1.00
Total Program FTE	1.00

# Water Resources | PLANET RANCH WATER RIGHTS

# **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

Actual Actual Projected Projected FY 2003/04 FY 2004/05 FY 2005/06 FY 2006/07 4,160 4,160 4,160

Annual hours expended to perform the minimum level of Ranch maintenance/security to maintain and protect assets and water rights

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Maintain ranch assets and water rights	yes	yes	yes	yes

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	104,995	106,997	106,997	110,310
Contractual Services	86,184	104,805	104,805	108,592
Commodities	36,991	20,575	20,575	28,200
Total Program Budget	\$228,170	\$232,377	\$232,377	\$247,102

# Water Resources | WATER & WASTEWATER ENGINEERING

## **Program Description:**

The Water & Wastewater Engineering program manages five- and fifteen-year plans for Water Resources capital improvement projects. These plans initiate analyses and directs all water and wastewater infrastructure improvements within Scottsdale, including engineering evaluation of various operational and maintenance issues (i.e., arsenic remediation techniques).

#### Trends:

The engineering and operational impacts continue to rise as the unfunded federal regulatory compliance dates near.

# **Program Broad Goals:**

Plan, budget, implement, and manage the water and wastewater capital improvement projects program.

Initiate, implement, and manage engineering design projects to provide best available technologies for water quality issues, such as arsenic and disinfections by-product remediation.

Ensure water and wastewater infrastructure for private development is in compliance with the master plan and operational needs.

# Program 2006/07 Objectives:

Update the Capital Improvement Projects plan every year. Ensure that capital improvements needed to accommodate growth are updated in the development fees needs.

Manage and coordinate engineering design contracts for water and wastewater treatment issues, including pilot technology testing to determine best available remediation techniques.

Provide the resources to review developer plans to ensure compliance with the City master plan and infrastructure needs.

# **Program Provided in Partnership With**

Capital Project Management, Project Review, Accounting

## **Program Customers**

Capital Project Management, Planning, Financial Services

# **Basic Equipment**

Personal computers, Microsoft Office Suite, 10-key calculators

# **Special Equipment**

None

#### City Council's Broad Goal(s)

Program Staffing	
1 FT Planner, Principal	1.00
1 FT Water Resources Analyst	1.00
2 FT Water Resources Engineer	2.00
2 FT Water Resources Engineer, Sr.	2.00
Total Program FTE	6.00

# Water Resources | WATER & WASTEWATER ENGINEERING

## **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of water and sewer infrastructure stipulations written for development reviews	167	172	175	185

**Program/Service Outcomes: (based on program objectives)** 

Actual Projected Projected FY 2003/04 FY 2004/05 FY 2005/06 FY 2006/07

Complete and receive approval of the yes yes yes yes yes five-year capital Improvement Projects plan.

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	267,017	435,904	435,904	551,432
Contractual Services	23,741	22,887	22,887	30,070
Commodities	719	1,000	1,000	1,000
Capital Outlays	-	-	-	-
Total Program Budget	\$291,477	\$459,791	\$459,791	\$582,502

# Water Resources | WESTWORLD GOLF RECHARGE

# **Program Description:**

The WestWorld Golf and Recharge program provides for the contractual obligation for water service to the Sanctuary Public Golf Course. This program also provides for water recharge into the groundwater aquifer as required under the agreement with the U.S. Bureau of Reclamation, which owns the land the facilities are located on. All costs are recovered through rates charged to the Sanctuary Golf Course for the services.

# Trends:

Contractual obligation to provide water service with all costs recovered through rates charged for the service.

# **Program Broad Goals:**

Provide irrigation water service per the agreement.

Provide operation, maintenance, and repairs of the water recharge facilities.

Ensure that all costs associated with providing this service are recovered through the rates charged under the agreement.

# Program 2006/07 Objectives:

Effectively operate the system to produce sufficient quantity of irrigation and recharge water to meet contractual demands.

Review and adjust rates charged for this service to ensure that all costs are recovered.

Comply with the State Aquifer Protection Permit requirements on recharge.

# **Program Provided in Partnership With**

Accounting, Purchasing, Accounts Payable, Payroll

# **Program Customers**

WestWorld Golf Course, Accounting, Arizona Department of Environmental Quality

# **Basic Equipment**

Personal computers, Microsoft Office Suite, 10-key calculators

# **Special Equipment**

None

#### City Council's Broad Goal(s)

Program/Service	Outputs:	(goods,	services,	units	produced)	)
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	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Supplied water to the Sanctuary Golf Course at WestWorld per agreement	417	425	425	425
Million gals recharged at the Westworld site		71	100	150

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Provide contract water service to the golf course and recharge facilities with the costs recovered through rates charged	yes	yes	yes	yes

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	6,256	-	-	_
Contractual Services	38,084	38,257	38,257	55,171
Commodities	98,737	99,000	99,000	124,000
Total Program Budget	\$143,077	\$137,257	\$137,257	\$179,171

# Water Resources | INLET GOLF COURSE IRRIGATION

# **Program Description:**

The Inlet Golf Course Irrigation program provides for the contractual obligation for water service to the Scottsdale Silverado Public Golf Course. All costs are recovered through rates charged for the service.

#### Trends:

Contractual obligation to provide irrigation water service with all costs recovered through rates charged for the service.

## **Program Broad Goals:**

Provide contractual water service and operation of the Silverado Golf Course water facilities.

Ensure that all costs associated with providing this service are recovered through the rates charged under the agreement.

# Program 2006/07 Objectives:

Provide sufficient quantity of irrigation water to meet contractual demands.

Review and adjust the rate charged to recover all costs of providing the service.

Test and calibrate the golf course meter every six months to assure correct measurement and proper billing.

# **Program Provided in Partnership With**

Accounting

### **Program Customers**

Silverado Golf Course, Accounting, Salt River Project

## **Basic Equipment**

Personal computers, Microsoft Office Suite, 10-key calculators

## Special Equipment

None

## City Council's Broad Goal(s)

# Water Resources | INLET GOLF COURSE IRRIGATION

# **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Water supplied to the Silverado Golf Course per agreement during the fiscal year	401	393	425	425

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Provide contract water service to the golf course with all costs recovered through rates charged.	yes	yes	yes	yes

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	-	4,476	4,476	4,707
Contractual Services	695	2,811	2,811	2,800
Commodities	41,175	43,500	43,500	43,500
Total Program Budget	\$41,870	\$50,787	\$50,787	\$51,007

# Water Resources | WATER & WASTEWATER OPERATIONS ADMINISTRATION

# **Program Description:**

The Water & Wastewater Operations Administration program provides leadership, direction, and support for the water and wastewater operations programs.

#### Trends:

The Water Operations Administration program takes all operations-related phone calls for distribution to the correct area for response. Due to program and system improvements, the number of citizen contacts is expected to decline over the next two years.

## **Program Broad Goals:**

Provide leadership, direction, and management to the Operations program to ensure the delivery of safe, reliable, efficient services.

# Program 2006/07 Objectives:

Manage the City water and wastewater Operations programs to provide safe and reliable services and to maintain compliance with all federal and state requirements.

Monitor and update the High Performance Work System, which promotes efficient use of the various disciplines within the Operations programs.

Continue implementation of security system improvements at water and wastewater sites.

#### **Program Provided in Partnership With**

Purchasing, Accounts Payable, Payroll, Utility Billing, Human Resources

# **Program Customers**

City water and wastewater customers, Utility Billing, Arizona Department of Environmental Quality

# **Basic Equipment**

Personal computers, Microsoft Office Suite, 10-key calculators, two-way radios for communication with field staff

# Special Equipment

None

#### City Council's Broad Goal(s)

Program Staffing	
4 FT Citizen Services Rep	4.00
1 FT Office Coordinator - Wtr Res	1.00
1 FT Systems Integrator	1.00
1 FT Training/Safety Coordinator	1.00
1 FT Water Operations Director	1.00
1 FT Water Operations Systems Coord	1.00
Total Program FTE	9.00

# Water Resources | WATER & WASTEWATER OPERATIONS ADMINISTRATION

# **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of phone inquiries processed which relate to water and sewer operational issues	25,950	27,435	27,000	26,800

Program/Service Outcomes: (based on program objectives)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Managed all Operations division programs to	Yes	Yes	Yes	Yes

Managed all Operations division programs to maintain compliance with all federal and state requirements.

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	593,068	620,724	620,724	645,348
Contractual Services	270,304	286,202	293,922	370,032
Commodities	34,817	30,500	30,500	33,250
Capital Outlays	8,358	-	-	-
Total Program Budget	\$906,547	\$937,426	\$945,146	\$1,048,630

# **Program Description:**

The Water Resources department promotes water conservation to citizens through education and incentives, and maintains compliance with the mandated Arizona Department of Water Resources Non-Per Capita Conservation program.

#### Trends:

As a mandated program, the City is required to meet all of the sixteen required conservation measures under the Arizona Department of Water Resources Non-Per Capita Conservation program.

# **Program Broad Goals:**

Promote water conservation to customers.

Maintain compliance with the State Non-Per Capita Conservation program.

# Program 2006/07 Objectives:

Provide water conservation best management practices information to citizens through education, workshops and literature.

Complete the sixteen conservation measures required under the Stipulated Agreement with the Arizona Department of Water Resources and report on those measures annually.

## **Program Provided in Partnership With**

Utility Billing, Plan Review, City Attorney

#### **Program Customers**

City water customers, Arizona Department of Water Resources

## **Basic Equipment**

Personal computers, Microsoft Office Suite, 10-key calculators

## Special Equipment

None

#### City Council's Broad Goal(s)

Program Staffing	
4 FT Water Conservation Specialist	4.00
1 FT Water Resources Analyst	1.00
Total Program FTE	5.00

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of water conservation educational workshops provided	23	22	22	22
Number of customer contacts made by the Water Conservation office	37,956	43,410	44,000	45,000

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Maintain compliance with Arizona Department of Water Resources requirements under the Stipulated Agreement	yes	yes	yes	yes

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	254,714	364,070	364,070	407,996
Contractual Services	207,137	542,462	542,462	566,331
Commodities	41,836	23,506	23,506	24,495
Capital Outlays	-	-	-	26,500
Total Program Budget	\$503,687	\$930,038	\$930,038	\$1,025,322

# Water Resources | WATER DISTRIBUTION

# **Program Description:**

The Water Distribution program provides for operation, maintenance, repair, installation and replacement of the City water distribution system that includes: 1,920 miles of water lines, 9,667 fire hydrants, 85,623 water service lines, and 40,830 main line water valves.

#### Trends:

Parts of the water system are old and deteriorating, causing leaks and the need for repairs. The aggressive replacement of aging water lines through capital improvement will produce a reduction in emergency main repairs.

# **Program Broad Goals:**

Deliver safe and reliable potable water to City water customers through the distribution system.

Provide proper maintenance for the distribution system components to prevent service disruptions.

Change out old water meters to increase revenues and water accountability.

# Program 2006/07 Objectives:

Minimize service disruptions through preventive maintenance and proper underground utility identification and markings.

Deliver the highest level of service and responses to the City water customers.

Continue with the aggressive meter replacement program to increase revenues and water accountability.

# **Program Provided in Partnership With**

Utility Billing, Risk Management, Purchasing, GIS Data Services, Plan Review, Inspection Services

# **Program Customers**

City water customers, Utility Billing

# **Basic Equipment**

Personal protective equipment and various hand tools

## **Special Equipment**

Backhoes, dump trucks, pickup trucks, barricades, shoring equipment, boring tools, line pullers, metal detectors, line locators, vacuum units, air compressors, field laptop computers, City band hand held radios, lift cranes, water pumps

#### City Council's Broad Goal(s)

Program Staffing	
3 FT Maintenance Worker I	3.00
1 FT Survey Technician II	1.00
2 FT Water Operations Field Coord	2.00
2 FT Water Operations Supervisor	2.00
10 FT Water Services Worker	10.00
11 FT Water Services Worker, Sr.	11.00
6 FT Wtr/Wstwtr Field Rep	6.00
Total Program FTE	35.00

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of water line repairs made during the fiscal year	322	349	300	260

Program/Service Outcomes: (based on program objectives)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of meters changed out to capture	3,738	4,376	5,230	5,230

water revenues and increase water accountability.

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	1,894,242	2,105,627	2,105,627	2,167,554
Contractual Services	792,299	795,960	795,960	934,112
Commodities	1,243,110	970,370	970,783	1,294,726
Capital Outlays	22	49,500	-	-
Total Program Budget	\$3,929,673	\$3,921,457	\$3,872,370	\$4,396,392

# **Program Description:**

The Water Production program provides for operation, maintenance, repair, and replacement of over 500 Water Production facilities that produce safe, clean water to Scottsdale residents and visitors. The program includes 31 potable deep well pump sites, 43 reservoirs with a storage capacity of 61 million gallons, 86 potable water booster pump stations, and 340 pressure reducing valve stations. The program also regulates and monitors over 10,000 backflow assemblies that require annual inspection under the state-mandated Backflow Protection program.

#### Trends:

The rapid growth of development in the City over the past few years has slowed, allowing the Water Production staff to focus on preventive and predictive maintenance, increasing the efficiency and extending the life of primary equipment. With increased utilization of available renewable surface water supplies, groundwater wells will be used for peak demand, primarily in the summer months and for long-term drought protection.

# **Program Broad Goals:**

Deliver safe and reliable potable water to City water customers through the production facilities.

Meet the state requirement of reducing groundwater use.

Operate and maintain the water production system in an effective and cost efficient manner.

# Program 2006/07 Objectives:

Minimize service disruptions by preventive maintenance on all pumping equipment associated within City pump stations, reservoirs and pressure reducing valve stations.

Operate and maintain the water production system in an effective and cost efficient manner.

Continue reduction of groundwater withdrawals.

# **Program Provided in Partnership With**

Risk Management, Purchasing, Stores, Parks Recreation Facilities Maintenance, GIS Data Services, Department Support, Capital Project Management, Fleet Maintenance, Plan Review

# **Program Customers**

City water customers

# **Basic Equipment**

Hand tools, personal and field laptop computers, two way radios

# **Special Equipment**

Work vehicle, electrical/ohm test meter, calibrating instruments, SCADA telemetry control communication equipment, infrared camera, vibration monitoring meter, numerous meters for troubleshooting electronic equipment

## **City Council's Broad Goal(s)**

Program Staffing	
1 FT Cmptrzd Mntce Mgmt Syst Tech	1.00
1 FT Cross Connection Controls Spec	1.00
1 FT Cross Connection Controls Tech	1.00
1 FT Electrician - Water	1.00
3 FT Electronic Technician - Water	3.00
1 FT Telemetry Controls Spec, Sr.	1.00
2 FT Telemetry Controls Specialist	2.00
1 FT Water Maintenance Tech Trainee	1.00
5 FT Water Maintenance Technician	5.00
2 FT Water Operations Field Coord	2.00
1 FT Water Operations Supervisor	1.00
1 FT Water Services Worker, Sr.	1.00
Total Program FTE	20.00

# Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Maintained pressure-reducing sites in the water system to compensate for new development in higher elevations of the City	340 sites	340	350	360

Percentage of ground water pumped to total potable water produced during the fiscal year.	Actual FY 2003/04 32%	Actual FY 2004/05 25%	Projected FY 2005/06 25%	Projected FY 2006/07 23%
Protect the potable water system by maintaining the Cross-Connection Program per regulations. Number of properly maintained cross-connection devises (running total).	9,586	10,109	10,600	11,000

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	1,250,530	1,364,038	1,364,038	1,418,581
Contractual Services	4,142,512	4,132,684	4,132,684	4,881,550
Commodities	869,109	679,960	683,749	806,797
Capital Outlays	461	-	-	-
Total Program Budget	\$6,262,612	\$6,176,682	\$6,180,471	\$7,106,928

# Water Resources | SOUTHERN NEIGHBORHOODS WATER SYSTEM

# **Program Description:**

The Southern Neighborhoods Water System program provides for the operation and maintenance of production wells and purchased water costs that are non-reimbursed costs associated with Superfund Central Groundwater Treatment Facility (CGTF). The program also addresses water quality issues related to the Superfund treatment process, including high nitrate levels, scaling problems, arsenic, and total dissolved solids problems.

#### Trends:

Provides a safe drinking water supply to the citizens of south Scottsdale, while reducing the reliance on other sources to meet the demands of the area. The existing production well field supplying the CGTF is over 50 years old and failing. Current modifications to the wells will insure a more reliable supply.

# **Program Broad Goals:**

Deliver safe and reliable potable water to City water customers through the Southern Neighborhood production facilities.

Meet or surpass all conditions of the EPA Consent Decree for the Superfund site.

## Program 2006/07 Objectives:

Operate the wells and CGTF to meet the minimum daily average pumping goal of 6,300 gpm established by the Superfund Consent Decree, which will effectively reduce our need to purchase additional water.

Maintain all equipment effectively.

# Program Provided in Partnership With

Water Production, Water Operations Administration

#### **Program Customers**

South Scottsdale Water Customers, U.S. Environmental Protection Agency, Arizona Department of Environmental Quality, Maricopa County Health Department

## **Basic Equipment**

Personal computers, Microsoft Office Suite

# **Special Equipment**

SCADA, Well Pumping Equipment, Distribution Pump Equipment, Chlorine Analyzers, air stripping column, air scrubber, proposed reverse osmosis equipment

# City Council's Broad Goal(s)

# Water Resources | SOUTHERN NEIGHBORHOODS WATER SYSTEM

# **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of millions of gallons of water purchased from the City of Phoenix during the fiscal year. Reduction due to new Chaparral	1,171	1,100	1,100	50

Water Treatment plant

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Exceed the minimum pumping goal of 6,300	Yes	Yes	Yes	yes
gpm avg daily flow				

<b>Expenditures By Typ</b>	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	20,605	62,726	62,726	70,098
Contractual Services	1,073,623	1,059,997	1,059,997	1,373,862
Commodities	2,505,366	1,726,764	1,727,912	465,900
Capital Outlays	1,082	-	-	-
Total Program Budget	\$3,600,676	\$2,849,487	\$2,850,635	\$1,909,860

# Water Resources | WASTEWATER COLLECTION

# **Program Description:**

The Wastewater Collection program provides operations and maintenance for the 1,301 miles of sewer lines and transmission lines that collect wastewater, including odor control, for all wastewater customers within the Scottsdale service area.

#### Trends:

Through the pro-active scheduling of cleaning, treatment of manholes for roaches and video inspections of new sewer installations, the number of odor and roach complaints and sewer stoppages has been reduced over the last several years.

# **Program Broad Goals:**

Provide safe, continuous transport of all wastewater within the City of Scottsdale.

Ensure correct sewer line operating conditions to avoid odor complaints.

Reduce the number of roach complaints in the sewer system.

# Program 2006/07 Objectives:

Complete scheduled sewer cleaning maintenance program for one-third of the system annually.

Video inspection of 100% of all new sewer installations and one-third of the existing system annually.

Provide roach control insecticide application for over 14,000 sewer manholes.

#### Program Provided in Partnership With

Fleet Maintenance, Capital Project Management, Risk Management, Utility Billing, GIS Data Services

#### **Program Customers**

City wastewater customers, U.S. Environmental Protection Agency, Department of Environmental Quality, Maricopa County Health Department

#### **Basic Equipment**

Personal protective equipment, various hand tools

## **Special Equipment**

City owned and operated hydro truck, confined space equipment, gas monitors, metal locaters, backhoes, dump truck, air compressors, shoring equipment, hand held City band radios, pick-up trucks, desktop and truck mounted computer, chlorine trailer, self contained breathing apparatus (SCBA's)

#### City Council's Broad Goal(s)

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of roach complaints received during the fiscal year	171	150	150	140
Number of sewer stoppages reported during the fiscal year	44	32	36	36

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of sewer manholes treated annually	20,815	12,243	13,600	14,500
with roach control insecticide				

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	134,416	153,405	153,405	164,675
Contractual Services	688,644	652,098	652,098	702,620
Commodities	499	-	-	-
Capital Outlays	-	-	-	-
Total Program Budget	\$823,559	\$805,503	\$805,503	\$867,295

# Water Resources | WASTEWATER MAINTENANCE

## **Program Description:**

The Wastewater Maintenance program operates, maintains, and repairs 42 sewer pump stations in the wastewater collection system, including electrical, mechanical, and odor control needs. The sites are monitored 24-hours-per-day per the radio telemetry system and physically checked on a weekly basis.

#### Trends:

As part of a reorganization, Water/Waste Production dedicated four FTEs to assume the lift station maintenance as part of their normal assigned duties. Since this reorganization, assigned staff have increased preventive maintenance, reducing required repairs and overtime.

# **Program Broad Goals:**

Operate and maintain sewer lift stations without spills or odor complaints.

Meet or surpass all state and federal regulatory requirements.

# Program 2006/07 Objectives:

Operate the sewer lift stations in an effective and cost efficient manner without sewer spills or odor complaints.

Provide preventive maintenance and quick responses to operational needs.

Reduce chemical costs related to odor control within the system.

#### **Program Provided in Partnership With**

Risk Management, Purchasing, Stores, GIS Data Services, Department Support, Capital Project Management, Fleet Maintenance, Operations

#### **Program Customers**

City wastewater customers, U.S. Environmental Protection Agency, Department of Environmental Quality, Maricopa County Health Department

#### **Basic Equipment**

Hand tools, personal computer odor monitoring meters

## Special Equipment

Includes electric pumps, telemetry control system (SCADA) communications equipment, generator, odor control system, work vehicle, calibrating instruments, infrared camera, vibration monitoring meter, odor monitoring meter and numerous meters for trouble shooting electronic equipment

## City Council's Broad Goal(s)

Program/Service	Outputs:	(goods,	services,	units	produced)	)

Number of sewer lift station repairs during the fiscal year	Actual FY 2003/04 262	Actual FY 2004/05 423	<b>Projected FY 2005/06</b> 375	Projected FY 2006/07 375
Number of hours of overtime needed to make sewer lift station repairs during the fiscal year	88	142	100	100
Program/Service Outcomes: (based on program	am objectives)			

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Minimize sewer discharges that cause a "Notice of Violation" to be issued by the State.	0 sewer discharges	0 sewer discharges	0 sewer discharges	0 Sewer discharges

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	102,635	107,755	107,755	111,852
Contractual Services	201,044	158,862	158,862	243,089
Commodities	181,106	107,500	109,984	137,542
Total Program Budget	\$484,785	\$374,117	\$376,601	\$492,483

## **Program Description:**

The Pump Back System program operates and maintains five large Pump Back Stations designed to pump up to 32 million gallons of sewage to the Water Campus where it is treated for golf course irrigation and/or groundwater recharge use. The maintenance needs include electrical, mechanical, and odor control. The sites are continually monitored 24-hours-per-day per the radio telemetry system and are physically checked daily.

#### Trends:

All five large pump stations are now in operations and are capable of pumping up to 32 million gallons per day of wastewater generated in the City north of Doubletree Ranch Road to the Water Campus for treatment and use for golf course irrigation and recharging the groundwater aquifer.

# **Program Broad Goals:**

Operate and maintain pumpback stations without spills or odor complaints.

Meet or surpass all federal and state regulatory requirements.

## Program 2006/07 Objectives:

Operate the system with out spills or odor problems.

Maintain all equipment effectively.

Reduce chemical costs related to odor control within the system.

# **Program Provided in Partnership With**

Risk Management, Purchasing, Stores, GIS Data Services, Department Support, Capital Project Management, Fleet Maintenance, Operations

# **Program Customers**

Reclaimed Water Distribution System (RWDS), Arizona Department of Environmental Quality, Arizona Department of Water Resources

# **Basic Equipment**

Reclaimed Water Distribution System (RWDS), Arizona Department of Environmental Quality, Arizona Department of Water Resources

# **Special Equipment**

The equipment involved includes electric pumps, telemetry control system communications equipment (SCADA), generators, odor control systems, work vehicle, calibrating instruments, infrared camera, vibration monitoring meter, odor monitoring meter, numerous meters for trouble shooting electronic equipment

#### City Council's Broad Goal(s)

Program Staffing	
1 FT Wastewater Collection Spec	1.00
4 FT Wastewater Collection Tech	4.00
Total Program FTE	5.00

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of million gallons per day of wastewater pumped to the City Water Campus for treatment	14	14	14	16

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of times a pump station has to be taken off-line for repairs.	0	0	0	0

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	258,724	283,552	283,552	348,745
Contractual Services	772,406	985,653	985,653	1,145,367
Commodities	571,606	424,525	432,782	566,573
Capital Outlays	-	-	-	51,000
Total Program Budget	\$1,602,736	\$1,693,730	\$1,701,987	\$2,111,685

# Water Resources | RWDS ADMINISTRATION

# **Program Description:**

The Reclaimed Water Distribution System (RWDS) Administration program provides for the contractual obligation for operation and maintenance of the RWDS, providing irrigation water service for 22.5 private golf courses. It includes five booster stations and separate pipeline paid for by RWDS customers. All costs are recovered through rates charged to RWDS customers.

#### Trends:

Due to system use and age, maintenance is increasing. Although there have been no major problems within the system, minor equipment replacement needs are expected to increase. Due to some electric equipment being outdated, some parts are no longer obtainable. Water Production has outlined a 4-year equipment replacement program.

## **Program Broad Goals:**

Meet all contractual obligations to provide irrigation water service.

Ensure that all costs associated with providing this service are recovered through the rates charged under the agreement.

#### Program 2006/07 Objectives:

Effectively operate the system to produce sufficient quantity and quality of irrigation water to meet contractual demands.

Review and adjust the rates charged to recover all costs associated with providing the service.

# **Program Provided in Partnership With**

Utility Billing, Risk Management, Purchasing, Stores, GIS Data Services, Capital Project Management, Fleet Maintenance, Operations

#### **Program Customers**

RWDS customers, Arizona Department of Environmental Quality

#### **Basic Equipment**

Hand tools, personal protection equipment, work uniforms, and personnel computer

#### Special Equipment

Work vehicle, electrical/ohm test meter, calibrating instruments, SCADA communication equipment, infrared camera, vibration monitoring meter, numerous meters for trouble shooting electronic equipment

#### City Council's Broad Goal(s)

Number of RWDS maintenance hours expended during the fiscal year	<b>Actual FY 2003/04</b> 725	Actual FY 2004/05 1,222	<b>Projected FY 2005/06</b> 1,200	Projected FY 2006/07 1,250
Acre feet of water provided to the RWDS courses annually (1 acre foot = 325,851 gallons)	11,775	11,857	12,000	12,000

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Provide contract water service to the RWDS golf courses with all costs recovered through rates charged.	yes	yes	yes	yes

<b>Expenditures By Typ</b>	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	51,025	60,173	60,173	63,839
Contractual Services	1,309,610	1,288,304	1,288,304	1,440,154
Commodities	533,690	658,380	658,380	1,114,370
Total Program Budget	\$1,894,325	\$2,006,857	\$2,006,857	\$2,618,363

# Water Resources | IRRIGATION WATER DISTRIBUTION SYSTEM

# **Program Description:**

The Irrigation Water Distribution System (IWDS) program provides for the contractual obligation for operations and maintenance of the IWDS serving four private golf courses and associated recharge facilities. The IWDS includes separate pipeline, nine recharge wells, seven booster stations, and three backup water wells paid for by IWDS customers. All costs are recovered through rates charged to IWDS customers.

#### Trends:

The IWDS system began operation in July 2003 and includes recharge of Carefree basin per State requirements.

# **Program Broad Goals:**

Meet all contractual obligations to provide irrigation water service.

Ensure that all costs associated with providing this service are recovered through the rates charged under the agreement.

Recharge water into the Carefree Basin Aquifer when excess water is available.

# Program 2006/07 Objectives:

Effectively operate the system to produce sufficient quantity and quality of irrigation water to meet contractual demands.

Review and adjust the rates charged to assure that all costs allowed under the agreement are recovered.

Recharge water into the Carefree Basin Aquifer and comply with the Aquifer Protection Permit requirements on recharge.

# **Program Provided in Partnership With**

Risk Management, Purchasing, Stores, GIS Data Services, Department Support, Capital Project Management, Fleet Maintenance, Operations

# **Program Customers**

The IWDS golf courses, Arizona Department of Environmental Quality, Arizona Department of Water Resources

# **Basic Equipment**

Hand tools, personal protection equipment, work uniforms, personal computer

# **Special Equipment**

Work vehicle, electrical/ohm test meter, calibrating instruments, SCADA communication equipment, infrared camera, vibration monitoring meter, numerous meters for trouble shooting electronic equipment

#### City Council's Broad Goal(s)

Program Staffing	
1 FT Electronic Technician - Water	1.00
Total Program FTE	1.00

# Water Resources | IRRIGATION WATER DISTRIBUTION SYSTEM

# **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of acre feet of water (325,851 gallons in each acre foot) delivered to IWDS customers	1,475	1,925	2,100	2,100
Number of acre feet of water recharged as part of the IWDS project	1,175	2,350	3,000	3,000

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Provide contract water service to the IWDS golf courses and recharge facilities with the costs recovered through rates charged.	yes	yes	yes	yes

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	72,542	60,419	60,419	63,975
Contractual Services	482,253	859,035	859,035	968,341
Commodities	207,724	321,200	321,200	323,370
Capital Outlays	26,084	-	-	-
Total Program Budget	\$788,603	\$1,240,654	\$1,240,654	\$1,355,686

# **Program Description:**

The Central Groundwater Treatment Facility (CGTF) program provides for the contractual obligation with the EPA Consent Decree to operate and maintain the Superfund treatment plant designed to remove Volatile Organic Compounds (VOC) found in the City's groundwater supply in the early 1980's. The main VOC of concern is trichloroethylene. EPA identified the area as the North Indian Bend Wash (NIBW) Superfund Site and the CGTF was constructed in 1993-94 in accordance with the 1991 Consent Decree (CIV-91-1835-PHX-WPC). The CGTF was constructed by the NIBW participating companies responsible for the contamination and transferred ownership to the City on March 18, 1994. All costs are reimbursed by the participating companies.

#### Trends:

Providing a safe drinking water supply to the customers of south Scottsdale, while assisting the EPA in plume management and control, is a key trend that will be monitored and analyzed. Yhe continued pumping of the contaminated aquifers is expected to diminish the plume in both size and concentration. Staff will be looking to reduce levels of VOCs remaining in the aquifer, while maintaining the volume of water required to meet system demands.

# **Program Broad Goals:**

Meet or exceed all Effective Remediation Goals set in the Superfund Consent Decree to achieve effective remediation of the contaminated groundwater.

Maintain High Standard of Regulatory Compliance.

Provide proper operation and maintenance to avoid service disruptions.

# Program 2006/07 Objectives:

Effectively operate the CGTF plant to meet the minimum pumpage goal of 6,300 gpm daily average as required.

Monitor and report to regulatory agencies on plant outputs including quantity, water quality and air quality.

Maintain all plant equipment effectively.

#### **Program Provided in Partnership With**

Risk Management, Purchasing, Accounts Payable, Payroll, Water Operations Administration

## **Program Customers**

South Scottsdale water customers, EPA, Superfund, Arizona Department of Environmental Quality, Maricopa County Health Department

# **Basic Equipment**

Personal computers, Microsoft Office Suite

# **Special Equipment**

SCADA, Well Pumping Equipment, Process air fans, Natural Gas Heaters, GAC contactors

# City Council's Broad Goal(s)

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of pounds of Volatile Organic Compounds removed annually through the CGTF treatment process	2,549	2,511	2,400	2,400

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Met Superfund Consent Decree minimum pumping goal of 6,300 gpm avg daily flow	yes	yes	yes	yes
Maintained high level of regulatory compliance	yes	yes	yes	yes

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	177,356	65,381	65,381	68,693
Contractual Services	437,727	465,935	465,935	505,513
Commodities	264,097	322,200	322,200	331,000
Capital Outlays	1,060	-	-	-
Total Program Budget	\$880,240	\$853,516	\$853,516	\$905,206

## **Program Description:**

The Water/Wastewater Quality program manages the water and wastewater quality groups to ensure water quality and compliance with federal regulations. The Quality program operates the water and wastewater quality laboratories and the Superfund compliance group.

#### Trends:

With the existing and proposed unfunded Federal regulatory mandates (i.e., arsenic and the proposed disinfection by-products regulations), the impacts on this program will increase.

# **Program Broad Goals:**

Ensure that the City Water Resources Department is in compliance with all water and wastewater quality regulations.

# Program 2006/07 Objectives:

Provide the sampling, testing, analysis and reporting to assure compliance.

# **Program Provided in Partnership With**

Risk Management, Purchasing, Accounts Payable, Payroll

# **Program Customers**

Water and wastewater customers, Wastewater Reclamation, Industrial Pretreatment, Superfund, Water Resources, Arizona Department of Environmental Quality

## Basic Equipment

Personal computers, Microsoft Office Suite

#### Special Equipment

Laboratory instruments

#### City Council's Broad Goal(s)

Program Staffing	
3 FT Chemist I	3.00
6 FT Chemist II	6.00
1 FT Chemist, Sr.	1.00
1 FT Drinking Water Program Coord	1.00
1 FT Laboratory Technician	1.00
1 FT Qlty Assur & Reg Compl Supvr	1.00
1 FT Water Operations Systems Coord	1.00
1 FT Water Quality Director	1.00
1 FT Water Quality Sampler	1.00
1 FT Water Quality Specialist	1.00
1 FT Water Quality Technician	1.00
Total Program FTE	18.00

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of water and wastewater quality tests	23,797	21,444	20,000	22,000
performed annually				

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Maintained a high level of regulatory compliance for the drinking water system	yes	yes	yes	yes

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	986,132	1,256,930	1,256,930	1,413,750
Contractual Services	337,220	495,713	498,941	485,118
Commodities	183,132	215,459	220,834	228,419
Capital Outlays	-	-	-	-
Total Program Budget	\$1,506,484	\$1,968,102	\$1,976,705	\$2,127,287

# Water Resources | TREATMENT PLANT STAFFING

# **Program Description:**

The Treatment Plant Staffing program is designed to capture salaries and individual costs for the multi-tasked professional staff at all treatment plants. Staffing costs are located in this program and time worked at each separate plant is charged to the appropriate Treatment program. All operators are trained and state certified to operate all treatment plants, which enables them to rotate from plant to plant.

#### Trends:

Staffing needs have continued to increase due to new facilities, expansions of existing facilities, aging plants requiring increased maintenance levels, and increasing regulatory compliance issues.

# **Program Broad Goals:**

Facilitate rotation of the multi-trained treatment plant operators.

# Program 2006/07 Objectives:

Track treatment plant staffing costs.

# **Program Provided in Partnership With**

**Human Resources** 

# **Program Customers**

Treatment and Water Quality

# **Basic Equipment**

Personal computers, Microsoft Office Suite

## Special Equipment

None

#### City Council's Broad Goal(s)

Program Staffing	
2 FT Administrative Secretary	2.00
1 FT Cntl Grndwtr Trtmnt Fac Coord	1.00
4 FT Electronic Technician - Water	4.00
2 FT HVAC Technician	2.00
1 FT Process Control Analyst	1.00
1 FT Regulatory Compliance Analyst	1.00
1 FT Sr Wtr Plant Oper	1.00
1 FT Systems Integrator	1.00
1 FT Training/Safety Coordinator	1.00
1 FT Water Campus Compliance Spec	1.00
2 FT Water Campus Maintenance Spec	2.00
2 FT Water Campus Maintenance Tech	2.00
2 FT Water Maintenance Tech, Sr.	2.00
1 FT Water Maintenance Technician	1.00
1 FT Water Res Tech Plng/Supp Coord	1.00
1 FT Water Treatment Director	1.00
4 FT Wtr/Wstwtr Trmnt PInt Opr, Sr.	4.00
1 FT Wtr/Wstwtr Trtmnt Plnt Coord	1.00
1 FT Wtr/Wstwtr Trtmnt Plnt Mgr	1.00
18 FT Wtr/Wstwtr Trtmnt Plnt Oper	18.00
Total Program FTE	48.00

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of operators needed to operate the three Water Campus treatment plants 24 hours a day, 365 days a year.	12	12	17	20
Number of maintenance technicians needed to maintain and repair the three water Campus Treatment Plants	7	9	11	12

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Treatment plants operate with full staff 100% of the time.	yes	yes	yes	yes

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	1,315,317	1,716,993	1,716,993	2,103,113
Contractual Services	30,141	118,691	118,691	189,335
Commodities	14,858	24,166	24,481	49,320
Capital Outlays	21,459	-	-	237,000
Total Program Budget	\$1,381,775	\$1,859,850	\$1,860,165	\$2,578,768

# Water Resources | CAP TREATMENT PLANT

### **Program Description:**

The CAP Water Treatment Plant program provides for operations, maintenance, and repair of the City 50 million gallon-per-day drinking water facility.

#### Trends:

As a result of restrictions on ground water usage, the City will continue to maximize use of available surface water supplies in areas historically served by groundwater. The existing groundwater supply will be used to supplement high summer demand and to provide drought protection.

### **Program Broad Goals:**

Provide a sufficient quantity of drinking water for City customers that surpass all federal and state requirements.

Operate and maintain the plant in a cost efficient manner.

Operate the CAP Plant to maximize the use of CAP surface water.

### Program 2006/07 Objectives:

Operate the treatment plant effectively to produce water quantity and quality that consistently surpasses all requirements.

Operate and maintain the plant in a cost efficient manner maximizing surface water use.

Expand the plant capacity with granular activated carbon equipment added to improve water quality.

## Program Provided in Partnership With

Risk Management, Purchasing, AP & Payroll

#### **Program Customers**

Water Quality Laboratory, Arizona Department of Environmental Quality

#### **Basic Equipment**

Personal computers, Microsoft Office Suite

#### Special Equipment

Plant equipment, feed systems, pumps, laboratory equipment

#### City Council's Broad Goal(s)

Program/Service	<b>Outputs:</b>	(goods.	services.	units	produced)	
	- atpate.	150000	,		p ,	

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Percentage of CAP surface water use of the	65%	68%	70%	72%
total water demand				

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of days that the CAP Water Treatment Plant operates in compliance with federal drinking water standards	365	365	365	365
Number of days that the CAP finished water turbidity is 80% better than EPA standard of .5 NTU	365	365	365	365

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	444,631	368,960	368,960	378,750
Contractual Services	1,008,552	1,884,096	1,884,096	2,121,321
Commodities	5,895,513	6,117,220	6,123,702	6,767,000
Capital Outlays	7,286	-	-	-
Total Program Budget	\$7,355,982	\$8,370,276	\$8,376,758	\$9,267,071

### **Program Description:**

The Industrial Pretreatment program regulates and monitors industrial and commercial sewer discharges for pollutants, toxic chemicals, including restaurant discharges of fats, oils, and grease into the City wastewater system. The work performed prevents clogging of the collection system and associated odor problems.

#### Trends:

Growth of new industries and restaurants into the City will require a continuing effort to upgrade inspection and enforcement capabilities.

### **Program Broad Goals:**

Ensure compliance with industrial discharge permits for all permitted discharges.

Ensure compliance with grease discharge regulations to avoid sewer service backups and odor problems.

### Program 2006/07 Objectives:

Monitor and sample industrial and commercial users.

Inspect over 500 restaurants yearly for fats, oils, and grease compliance.

Ensure regulatory compliance to avoid sewer backups and odor problems.

### **Program Provided in Partnership With**

Risk Management, Purchasing, Accounts Payable, Payroll

### **Program Customers**

Industrial and restaurant customers, Water Resources, Sub Regional Operating Group (SROG), Arizona Department of Environmental Quality

#### **Basic Equipment**

Personal computers, Microsoft Office Suite

#### Special Equipment

Wastewater sampling equipment

### **City Council's Broad Goal(s)**

Program Staffing	
2 FT Water Quality Specialist	2.00
1 FT Wtr/Wstwtr Trmnt Plnt Opr, Sr.	1.00
Total Program FTE	3.00

regulatory programs

Program/Service Outputs: (goods, services, units produced)

Actual Actual Projected Projected FY 2003/04 FY 2004/05 FY 2005/06 FY 2006/07 Number of restaurants inspected yearly 421 430 485 500

Program/Service Outcomes: (based on program objectives)

Actual FY 2003/04 FY 2004/05 FY 2005/06 FY 2006/07

Maintained compliance with the Industrial Fretarment and Fats, Oils and Grease

Actual FY 2004/05 FY 2005/06 FY 2006/07

Projected FY 2006/07

FY 2004/05 FY 2005/06 FY 2006/07

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	137,891	145,726	145,726	219,046
Contractual Services	27,064	20,439	20,439	40,482
Commodities	6,436	16,894	16,894	26,510
Capital Outlays	-	-	-	-
Total Program Budget	\$171,391	\$183,059	\$183,059	\$286,038

# Water Resources | GAINEY WASTEWATER RECLAMATION PLANT

### **Program Description:**

The Gainey Wastewater Reclamation Plant program provides wastewater treatment at a small (1.7 mgd) satellite plant to irrigate the 36-hole Gainey Ranch golf course with reclaimed water. Costs are reimbursed through rates charged for the service.

#### Trends:

This satellite facility has been refurbished to include phosphorus reduction, as requested by Gainey Ranch. The plant is aging and will require increased levels of corrective maintenance.

### **Program Broad Goals:**

Treat wastewater to irrigation standards to meet the contractual demands at Gainey Ranch.

Ensure compliance with state effluent re-use water quality standards.

Operate and maintain plant in a cost efficient manner without odor complaints.

## Program 2006/07 Objectives:

Operate the treatment plant effectively to produce a consistent quantity and quality of irrigation water that exceeds all contract and state reuse requirements.

Maintain all equipment effectively.

Operate the treatment plant without odor complaints.

#### **Program Provided in Partnership With**

Risk Management, Purchasing, Accounts Payable, Payroll

#### **Program Customers**

Gainey Ranch Golf Course, Water Resources

### **Basic Equipment**

Personal computers, Microsoft Office Suite

#### Special Equipment

Plant equipment, feed systems, pumps, laboratory equipment

#### City Council's Broad Goal(s)

# Water Resources | GAINEY WASTEWATER RECLAMATION PLANT

### **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of odor complaints from the Gainey Ranch Treatment Plant process	0	0	0	0

Program/Service Outcomes: (based on program objectives)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Met the contractual and regulatory obligations	yes	yes	yes	yes

for supplying Gainey Ranch with treated effluent for irrigation use on the Golf Course and common areas

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	93,066	158,963	158,963	161,203
Contractual Services	170,733	154,685	154,685	182,958
Commodities	70,729	69,500	74,222	78,500
Total Program Budget	\$334,528	\$383,148	\$387,870	\$422,661

# Water Resources | ADVANCED WATER TREATMENT PLANT

## **Program Description:**

The Advanced Water Treatment Plant program provides for advanced treatment of excess wastewater to drinking water standards for recharge into the groundwater. This program operations surpasses all federal and state regulatory requirements and contributes toward achieving State Groundwater Management Act Assured water supply goals.

#### Trends:

The Water Resources Master plan in compliance with the State Assured Water Supply program, requires recharge of highly treated wastewater and excess CAP water to meet future water needs and to obtain safe-yield.

### **Program Broad Goals:**

Ensure the highest water quality standards for recharged water are met.

Ensure sufficient water is recharged to meet the requirements of the Master Plan and Assured Water Supply.

# Program 2006/07 Objectives:

Operate the treatment plant to assure quality of treated water for recharge use exceeds all requirements.

Operate the system effectively to recharge a minimum of 6,000 acre-feet of water annually.

Maintain all equipment effectively

# **Program Provided in Partnership With**

Risk Management, Purchasing, Accounts Payable, Payroll

### **Program Customers**

Fiscal and Resource Management

#### **Basic Equipment**

Personal computers, Microsoft Office Suite

#### Special Equipment

Plant equipment, feed systems, pumps, laboratory equipment

#### City Council's Broad Goal(s)

# Water Resources | ADVANCED WATER TREATMENT PLANT

### **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Acre feet of water recharged during the fiscal	5,800	6,130	6,000	6,000
vear				

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Met or exceeded the planned recharge	yes	yes	yes	yes
amounts of high quality treated water				

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	220,881	324,064	324,064	354,500
Contractual Services	795,274	926,901	926,901	947,249
Commodities	332,519	350,200	351,766	490,000
Capital Outlays	7,286	22,500	-	-
Total Program Budget	\$1,355,960	\$1,623,665	\$1,602,731	\$1,791,749

# Water Resources | WATER CAMPUS WASTEWATER RECLAMATION PLANT

## **Program Description:**

The Water Campus 12 mgd Wastewater Reclamation Plant program treats wastewater collected in the City north of Doubletree Ranch Road for reuse on golf courses and for recharge of the groundwater aquifer.

#### Trends:

Growth will impact the amount of wastewater treated at the plant and increased flow will impact the treatment budget.

# **Program Broad Goals:**

Treat wastewater generated in the City north of Doubletree Ranch Road to irrigation quality water for use by the RWDS and IWDS golf courses, and for further treatment at the Advanced Water Treatment plant for recharge use.

Surpass all reuse water quality standards for all irrigation water supplied to RWDS and IWDS contractual golf course customers.

### Program 2006/07 Objectives:

Effectively operate the treatment plant to produce irrigation quality water from wastewater that surpasses all standards.

Maintain all equipment effectively.

Assure that the effluent is used only as permitted by the State.

### **Program Provided in Partnership With**

Risk Management, Purchasing, Accounts Payable, Payroll, RWDS golf course irrigation, Irrigation Water Distribution System

#### **Program Customers**

Water Resources, RWDS, IWDS, Arizona Department of Environmental Quality

#### **Basic Equipment**

Personal computers, Microsoft Office Suite

#### Special Equipment

Plant equipment, feed systems, pumps, laboratory equipment

#### City Council's Broad Goal(s)

# Water Resources | WATER CAMPUS WASTEWATER RECLAMATION PLANT

# **Performance Measures**

Program/Service	Outputs:	(aoods.	services.	units	produced)	)
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	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Number of million gallons per day of wastewater treated during the fiscal year	13	13	14	16

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Met the contractual irrigation needs of the RWDS golf courses	yes	yes	yes	yes
Met or surpassed the Arizona State Environmental Quality regulations for re-use of treated wastewater	yes	yes	yes	yes

Expenditures By Type							
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07			
Personal Services	445,371	431,912	431,912	443,280			
Contractual Services	7,325,007	5,572,553	5,572,553	6,537,151			
Commodities	637,582	797,000	811,125	868,500			
Capital Outlays	14,572	22,500	-	-			
<b>Total Program Budget</b>	\$8,422,532	\$6,823,965	\$6,815,590	\$7,848,931			

# Water Resources | CHAPARRAL WATER TREATMENT PLANT

### **Program Description:**

The Chaparral Water Treatment Plant program provides for operations, maintenance, and repair of the City 30 million gallon-per-day drinking water facility utilizing the City Salt River Project water allocation.

#### Trends:

This new drinking water plant is expected to be operational late March/early April 2006.

### **Program Broad Goals:**

Provide a sufficient quantity of drinking water to City customers that surpasses all federal and state requirements.

Operate the Chaparral Plant to maximize the use of Salt River Project water.

Maintain the plant effectively to avoid service disruptions.

### Program 2006/07 Objectives:

Operate the treatment plant effectively to produce water quality and quantity that consistently surpasses all requirements.

Operate the plant in a cost efficient manner maximizing the use of Salt River Project allocation water.

Maintain all plant equipment effectively.

### **Program Provided in Partnership With**

Risk Management, Purchasing, AP and payroll

#### **Program Customers**

Water Quality Laboratory, Arizona Department of Environmental Quality

#### **Basic Equipment**

Personal computers, Microsoft Office Suite

#### Special Equipment

Plant equipment, feed systems, pumps and laboratory equipment

#### City Council's Broad Goal(s)

# Water Resources | CHAPARRAL WATER TREATMENT PLANT

### **Performance Measures**

Program/Service Outputs: (goods, services, units produced)

**Projected Projected** Actual **Actual** FY 2003/04 FY 2005/06 FY 2006/07 FY 2004/05

Number of million gallons of Salt River Project surface water treated and delivered

950 3,500

**Program/Service Outcomes: (based on program objectives)** 

**Projected Projected** Actual Actual FY 2003/04 FY 2004/05 FY 2005/06 FY 2006/07

Number of days the plant operates in compliance with Federal Drinking Water standards

180- half year 365 operation

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	-	208,028	208,028	292,389
Contractual Services	-	630,000	630,000	1,180,044
Commodities	-	60,000	60,000	1,110,000
Capital Outlays	-	22,500	-	-
Total Program Budget	\$-	\$920,528	\$898,028	\$2,582,433

# Water Resources | ARSENIC TREATMENT

### **Program Description:**

The Arsenic Treatment program provides for treatment of groundwater high in arsenic levels to meet or surpass drinking water standards allowing for distribution into the City potable water system. This program operation surpasses all federal and state regulatory requirements.

#### Trends:

As a result of new arsenic regulations imposed by the Environmental Protection Agency, the City will operate three arsenic treatment facilities, reducing arsenic levels in the associated groundwater wells below the maximum contaminant level of 10 parts-per-billion. These treatment facilities allow the City to continue the use of available groundwater for potable use to citizens.

### **Program Broad Goals:**

Provide a sufficient quantity of drinking water for City customers that surpass all federal and state regulations.

Operate the treatment facilities in an effective and cost efficient manner.

Maintain all equipment preventive maintenance schedules.

# Program 2006/07 Objectives:

Operate the treatment sites effectively to produce water quantity and quality that consistently surpasses all requirements.

Operate the treatment sites in a cost efficient manner.

Provide preventive maintenance as scheduled to maintain equipment and avoid service disruptions.

### **Program Provided in Partnership With**

Risk Management, Purchasing, AP & Payroll

#### **Program Customers**

Water Quality Laboratory, Arizona Department of Environmental Quality, Maricopa County, Environmental Protection Agency

#### **Basic Equipment**

Personal computers, Microsoft Office Suite

### **Special Equipment**

Plant equipment, feed systems, pumps, laboratory equipment

#### **City Council's Broad Goal(s)**

Program Staffing	
1 FT Wtr/Wstwtr Trtmnt PInt Oper	1.00
Total Program FTE	1.00

Program/Service	<b>Outputs:</b>	(goods.	services.	units	produced	١

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Million gallons of water treated for arsenic			250	1,000

	Actual	Actual	Projected	Projected
	FY 2003/04	FY 2004/05	FY 2005/06	FY 2006/07
Number of days in full regulatory compliance			365	365

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	-	-	-	78,421
Contractual Services	-	-	-	1,154,000
Commodities	-	-	-	160,000
Capital Outlays	-	-	-	20,000
Total Program Budget	\$-	\$-	\$-	\$1,412,421